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EXAMINER

ZAND, KAMBIZ

ART UNIT PAPER NUMBER

2132

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,179

Applicant(s)

WHEELER ET AL.

Examiner

Kambiz Zand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/06/2001 and interview on 03/06/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-87 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 68-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-87 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>enclosed</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01.08/2003</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. **Claim 1**, drawn to a method of authenticating a message and an entity using digital signature and account identifier associated with public key, classified in class 713, subclass 170.
 - II. **Claims 2-67**, drawn to a method of authenticating an entity and a message by a third party using private/public key. classified in class 713, subclass 175.
 - III. **Claims 68-87**, drawn to a financial business method requiring authorization or authentication in class 705, subclass 44.
- **Inventions I, II and III** are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as the entity is authenticated solely by the message authentication. Invention II has separate utility such as performing entity authentication by the third party. Invention III has separate utility such as financial payment. See MPEP § 806.05.

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- Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- Because these inventions are distinct for the reasons given above and the search required for any one Group is not required for any other Group, restriction for examination purposes as indicated is proper.
- Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

1. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

2. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

3. During a telephone conversation with Mr. Chat D. Tillman on 03/06/02 a provisional election was made with traverse to prosecute the invention of II, claims 2-67. Affirmation of this election must be made by applicant in replying to this Office action.

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Claims 1 and 68-87 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Priority benefit claimed under Title 35, United States Code, § 119 have been acknowledged.
5. Priority benefit claimed under Title 35, United States Code, § 120 have been acknowledged.
6. **Claims 2-67** have been examined.

Information Disclosure Statement PTO-1449

7. The pages of the all references submitted on 08/19/2003, 01/29/2003, 01/27/2003 by applicant have been considered.

Specification

8. The disclosure is objected to because of the following informalities: Please update Cross References to Related Applications on page 1 (lines 12-20). Appropriate correction is required.

Drawings

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

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for example items "216 and 281-288" in fig. 2b. Correction of all drawings with similar deficiency is requested.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. **Claim 2-36** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-4 and 1 of U.S. Patent No. 6,820,202 B1, 6,820,199 and 6,789,189 B2 respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim(s) 1-4 and 1 of patent # 6,820,202 B1, 6,820,199 B2 and 6,789,189 B2 respectively contain(s) every element of claim(s) 2 of the instant application and as such anticipate(s) claim(s) 2 of the instant

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application.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

12. **Claims 2-67** provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21 of copending Application No. 10/248,623. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

Claim(s) 21 of application # 10/248,623 contain(s) every element of claim(s) 2 of the instant application and as such anticipate(s) claim(s) 2 of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. **Claims 2-21, 23, 24-29-36 and 38** are rejected under 35 U.S.C. 102(b) as being anticipated by Elgamal (5,671,279).

As per claims 2, 8, 9 and 34-36 Elgamal (5,671,279) teach a method of operating by a third party (see col. 6, line 67 and col. 7, line 1) a database for accounts, information pertaining to each account being retrievable from the database based on a unique identifier for that account (see col. 6, lines 56-58), comprising the steps of:

(a) first associating by the third party a public key of a respective public-private key pair with each unique account identifier (see col. 6, lines 56-58 and 66; col. 7, lines 1 and 52-56 and col. 10, lines 20-23), and thereafter

(b) performing entity authentication by the third party with respect to an electronic communication that is received by the third party (see col. 4, lines 41-44 and col. 5, lines 1-6) and that includes both a unique account identifier and a digital signature for a message regarding the account associated with the unique

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account identifier (see col.5, lines 20-31 and col. 6, lines 56-58 and 34-40) , the entity authentication consisting of solely conducting message authentication only using the digital signature received in each electronic communication (see col. 6, lines 37-38) and the public key associated with the unique account identifier accompanying the digital signature (see col. 34-37). Also see col.4-36 for detail with respect to claims 8,9 and 34-36.

As per claim 3-4 Elgamal (5,671,279) teach the method of claim 2, wherein the third party is an account authority and financial institution (see col. 3, lines 31-33 and col. 6, lines 55-57).

As per claim 5 Elgamal (5,671,279) teach the method of claim 3, wherein one of the public keys associated with an account is obtained from an account holder for that account (see col. 5, lines 9-12).

As per claims 6-7 and 24 Elgamal (5,671,279) teach the method of claim 3, wherein a public key associated with an account is obtained from a manufacturer of a device/ a distributor of a device that generates digital signatures using the corresponding private key (see col. 6, lines 34-36 and 41-53 where the key is an electronic key).

As per claim 10 Elgamal (5,671,279) teach the method of claim 2, wherein the information includes an account number (see col. 6, line 3).

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As per claim 11-12 Examiner takes official notice that checking on current balance and available credit during authorization process of a purchase is well known in the art.

As per claims 13 Elgamal (5,671,279) teach the method of claim 2, wherein the information includes a list of associated to accounts (see col. 6, lines 4-6).

As per claim 14 Elgamal (5,671,279) teach the method of claim 2, wherein the information includes a name of an account holder (see col. 6, lines 4-8).

As per claim 15 Elgamal (5,671,279) teach the method of claim 2, wherein the information includes an address of an account holder (see col. 6, line 4).

As per claims 16-17 Elgamal (5,671,279) teach the method of claim 2, wherein the information includes a social security number and a tax identification number of an account holder (see col. 5, line 27).

As per claim 18, 37 and 38 Elgamal (5,671,279) teach the method of claim 2, wherein the information regards a device containing a private key corresponding to the public key (see col. 5, lines 8-9).

As per claim 19 Elgamal (5,671,279) teach the method of claim 2, wherein the information includes security features of a device (see col. 4, lines 12-16).

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As per claim 20 Elgamal (5,671,279) teach the method of claim 2, wherein a digital signature is generated within a device (see fig. 1; col. 3, lines 66-67 and col. 4, lines 1-32) where each device (merchant, customer and financial institution or third party create their digital signature).

As per claims 21, 23 and 29-33 Elgamal (5,671,279) teach the method of claim 20, wherein the device comprises a personal computer (see col. 3, line 54), credit card and debit card and other IC type chips used in the other type of devices such as PDA, ID badge, security cards, and other smart cards (see col. 3, line 59).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 2-67** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (6,213,391 B1) in view of Eldridge et al (6,061,799 A).

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As per claims 2-67 Lewis (6,213,391 B1) teach a method of managing an account in a database, comprising the steps of:

recording information pertaining to each of the accounts in the database of an account authority (see abstract; col.3, lines 36-67; col.4, lines 1-13); and assigning a respective unique identifier to each account such that information pertaining to each respective account is retrievable from the database based on its unique identifier (see col.3, lines 36-67; col.4, lines 1-13 and 26-39 where the unique identifier is biometric or other unique information of the users and it is retrievable based on that unique identifier).

Lewis also teach that such unique identifier may be used to access number of user's accounts in line 13-19 of col.4 where one code is used to access multiple accounts of a user. Lewis (6,213,391 B1) also teach wherein a unique identifier comprises unique characteristics of the user such as biometric information, identification profile that could be numeric, alphanumeric, or other digital representation of the user's unique biometric or digital signature profile in col.3, lines 36-67 and col.4, lines 1-2 and therefore Lewis teach information that is account number, current balance, available credit, associated accounts, name, address, tax identification, all numeric or alphanumeric or other digital representation of the user's unique identification but do not disclose associating the same public key of a public-private key pair with a plurality of unique identifier; a device possessing the private key used to generate a digital signature of an electronic message; information includes security characteristics of a device possessing the private key used to generate a digital signature of an electronic message; the step of associating a public key with a unique identifier comprises recording the public key with

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the information retrievable based on the unique identifier; and electronic message includes no account-identifying information other than a unique identifier of an account. However Eldridge et al (6,061,799 A) teach association of unique identifier with public-private key as shown in fig.3a and a device possessing the private key used to generate a digital signature of an electronic message; information includes security characteristics of a device possessing the private key used to generate a digital signature of an electronic message; the step of associating a public key with a unique identifier comprises recording the public key with the information retrievable based on the unique identifier; and electronic message includes no account-identifying information other than a unique identifier (see fig.3a; col.5, lines 4-9 where at least one record includes account information such as client id file and client unique identifier such as password; see fig.3a where stored client file includes public-private key and public key identifier of the client; also see col.5, lines 35-55; see col.5, lines 56-67; col.6, lines 1-26 where the digital signature such as DDS may be employed as an option in encryption process and transmission of encrypted message; and col.6, lines 52-67; col.7, lines 1-14; see col.7, lines 18-48 and col.10, lines 23-52 and fig.2; col.3, lines 48-67; col.4, lines 1-14; col.6, lines 12-19; and where the fig.2 also clearly shown more than one server process or a third party that also represent the above limitations). Therefore Eldridge teach the unique id correspondence to public-private key to a device or a third party device and on the other hand Lewis teach how using the same unique id corresponds to number of accounts of a user. It would have been obvious to one of ordinary skilled in the art at the time the invention was made to utilize Eldridge's public-

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private key link to the unique identifier in Lewis personal identification system that is based on distinctive characteristics of the user in order to retrieve the same public key that corresponds to unique identifier from the database in order to generate encrypted data, digital signature in a secure manner. It would have been obvious also to one of ordinary skilled in the art to utilize the above method in well known portable devices such as PDA, smart cards such as credit cards and debit cards, dangle, touch screen portable PDA or other portable devices including jewelry in order to communicate wirelessly between the portable device and a host to implement the above method as being disclosed by Lewis (6,213,391 B1) in view of Eldridge et al (6,061,799 A) retrieve the same public key that corresponds to unique identifier from the database in order to generate encrypted data, digital signature in a secure manner. Also see the entire patents for detailed description of the above limitations.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent No. US (6,571,339 B1) teach use of processor identification for authentication.

U.S. Patent No. US (5,029,208) cipher-key distribution system.

U.S. Patent No. US (6,587,837 B1) teach method for delivering electronic content from an online store.

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U.S. Patent No. US (6,565,000 B2) teach system and methods utilizing passport documents.

U.S. Patent No. US (6,532,451 B1) teach nested strong loader apparatus and method.

U.S. Patent No. US (6,523,067 B2) teach system and method for using Internet based caller id for controlling access to an object stored in a computer.

U.S. Patent No. US (6,510,516 B1) teach system and method for authenticating peer components.

U.S. Patent No. US (6,061,794 A) teach system and method for performing secure device communications in peer-to-peer bus architecture.

U.S. Patent No. US (6,061,799 A) teach removable media for password-based authentication in a distributed system.

U.S. Patent No. US (6,021,202 A) teach method and system for processing electronic documents.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kambiz Zand whose telephone number is (571) 272-3811. The examiner can normally be reached on Monday-Thursday (8:00-5:00). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone numbers for the organization where this application or proceeding is assigned as (703)

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872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kambiz Zand

01/14/05